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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,875	01/23/2004	Mark Horton	018360/269788	6010
826	7590	03/10/2006	EXAMINER EKONG, EMEM	
ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			ART UNIT 2688	PAPER NUMBER

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/763,875

Applicant(s)

HORTON ET AL.

Examiner

EMEM EKONG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/23/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>08/11/04 & 08/24/05 & 03/25/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1-6, 8-10, 18-23, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6, 711,408 B1 to Raith in view of U. S. Patent No. 5,481,588 to Rickli et al. (Rickli).

Regarding claim 1, Raith discloses a method of testing electromagnetic signal strength near a target area (col. 1 lines 36-45, and col. 3 lines 37-45), comprising: establishing test parameters (col. 6 lines 31-37).

Raith discloses employing a service enterprise having a fleet of vehicles serving a territory near said target area, each of said vehicles assigned to one of a plurality of routes according to a dispatch plan, said dispatch plan comprising vehicle data and route data (col. 2 lines 65-67, and col. 6 lines 38-41, monitors the position of mobile terminals used in cars),

comparing said test parameters to said dispatch plan for each of said plurality of routes (col. 3 lines 10-27, and col. 6 lines 38-49), identifying one or more optimal routes from among said plurality of routes based on the results of said comparing, said optimal routes comprising those most nearly satisfying said test parameters (col. 6 lines 50-54).

However, Raith fails to specifically disclose employing a service enterprise having a fleet of vehicles serving a territory near said target area, each of said vehicles assigned to one of a plurality of routes according to a dispatch plan, said dispatch plan comprising vehicle data and route data, and installing one of a plurality of electromagnetic signal testing units in the vehicle assigned to each of said one or more optimal routes, and receiving data gathered by each of said plurality of signal testing units.

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Rickli discloses employing a service enterprise having a fleet of vehicles serving a territory near said target area (col. 2 lines 64-67), each of said vehicles assigned to one of a plurality of routes according to a dispatch plan, said dispatch plan comprising vehicle data and route data (col. 3 lines 24-33), and installing one of a plurality of electromagnetic signal testing units in the vehicle assigned to each of said one or more optimal routes, and receiving data gathered by each of said plurality of signal testing units (col. 2 lines 60-67, col. 3 lines 23-55, and col. 4 lines 60-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Raith, and have the electromagnetic signal testing units installed in a vehicle as disclosed by Rickli for the purpose of determining best quality of service.

Regarding claim 18, Raith discloses a system for testing electromagnetic signal strength near a target area (col. 1 lines 36-45, and col. 3 lines 37-45), comprising: a plurality of electromagnetic signal testing units, a wireless provider establishing test parameters (col. 4 lines 25-65) a service enterprise having a fleet of vehicles serving a territory near said target area, each of said vehicles in said fleet assigned to one of a plurality of routes according to a dispatch plan, said dispatch plan comprising vehicle data and plan data (col. 2 lines 65-67, and col. 6 lines 38-41, monitors the position of mobile terminals used in cars), means for comparing said test parameters to said dispatch plan for each of said plurality of routes (col. 3 lines 10-27, and col. 6 lines 38-49, communication network),

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means for identifying one or more optimal routes from among said plurality of routes based on results from said comparing means (col. 6 lines 50-54, network), said optimal routes comprising those most nearly satisfying said test parameters.

However, Raith fails to specifically disclose employing a service enterprise having a fleet of vehicles serving a territory near said target area, each of said vehicles assigned to one of a plurality of routes according to a dispatch plan, said dispatch plan comprising vehicle data and route data, and one of said plurality of testing units installed in the vehicle assigned to each of said one or more optimal routes, a receiver for receiving data gathered by each of said plurality of signal testing units.

Rickli discloses employing a service enterprise having a fleet of vehicles serving a territory near said target area (col. 2 lines 64-67), each of said vehicles assigned to one of a plurality of routes according to a dispatch plan, said dispatch plan comprising vehicle data and route data (col. 3 lines 24-33), and one of said plurality of testing units installed in the vehicle assigned to each of said one or more optimal routes, a receiver for receiving data gathered by each of said plurality of signal testing units (col. 2 lines 60-67, col. 3 lines 23-55, and col. 4 lines 60-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Raith, and have the electromagnetic signal testing units installed in a vehicle as disclosed by Rickli for the purpose of testing and determining best signal strength.

Regarding claims 2-6, 8-10, 19-23, and 25-28, Raith discloses the method of claims 1 and 18, wherein the step of establishing test parameters further comprises storing a geographic parameter, and wherein said route data includes a start location, an end location, and one or more intermediate stop locations (reads on claims 2 and 19) (col. 6 lines 23-34);

wherein said step of comparing said test parameters to said dispatch plan is executed by a computer software program product (reads on claims 9, 26, and 27) (see figure 4, and col. 5 lines 28-29);

wherein said step of establishing said test parameters is accomplished by a wireless provider, said wireless provider generally unrelated to said service enterprise (reads on claims 10 and 28) (see figure 1, and col. 3 lines 11-14).

However, Raith fails to disclose wherein said step of storing a geographic parameter further comprises: storing one or more tower identifiers, each defining a tower location, and storing one or more sector identifiers, each of said one or more sector identifiers comprising a sector location and an antenna configuration;

wherein the step of establishing test parameters further comprises storing a time parameter describing a time window, and wherein said route data includes a start time corresponding to said start location, an end time corresponding to said end location, and one or more intermediate stop durations corresponding to said one or more intermediate stop locations; and storing one or more lingering

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parameters, each of said one or more lingering parameters comprising a linger duration, a tower identifier, and a sector identifier

wherein said step of establishing test parameters further comprises:
storing one or more unit parameters, each of said one or more unit parameters comprising a unit type and a unit feature, and storing a quantity parameter defining an available number of said units, and wherein said vehicle data includes a number of vehicles in said fleet;

wherein said step of establishing test parameters further comprises:
assigning a weight to one or more of said test parameters, each of said weights correlated to the importance of said one or more of said test parameters relative to the others.

Rickli discloses wherein said step of storing a geographic parameter further comprises: storing one or more tower identifiers, each defining a tower location, and storing one or more sector identifiers, each of said one or more sector identifiers comprising a sector location and an antenna configuration (see figure 1, and col. 3 lines 18-22);

wherein the step of establishing test parameters further comprises storing a time parameter describing a time window, and wherein said route data includes a start time corresponding to said start location, an end time corresponding to said end location, and one or more intermediate stop durations corresponding to said one or more intermediate stop locations; and storing one or more lingering parameters, each of said one or more lingering parameters comprising a linger

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duration, a tower identifier, and a sector identifier (col. 2 lines 44-59, col. 3 lines 23-33, col. 6 lines 1-5, and col. 7 lines 45-col. 8 line 5);

wherein said step of establishing test parameters further comprises: storing one or more unit parameters, each of said one or more unit parameters comprising a unit type and a unit feature, and storing a quantity parameter defining an available number of said units, and wherein said vehicle data includes a number of vehicles in said fleet (reads on claims 3-6, and 20-23) (col. 5 lines 22-30, 44-51, and col. 7 lines 48-55);

wherein said step of establishing test parameters further comprises: assigning a weight to one or more of said test parameters, each of said weights correlated to the importance of said one or more of said test parameters relative to the others (reads on claims 8 and 25) (col. 2 lines 44-48 and col. 4 lines 60-65, with the aid of at least one test mobile remote unit).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Raith, and have a geographic parameter further comprises: storing one or more tower identifiers and test parameters further comprises storing a time parameter describing a time window as disclosed by Rickli for the purpose of determining best route by taking parameters above into consideration.

5. Claims 7 and 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Raith in view of Rickli, and further in view of U. S. Patent No. 5752164 to Jones.

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Regarding claim 7 and 24, the combination of Raith and Rickli discloses the method and system of claims 1 and 18, however, the combination fails to disclose wherein said step of installing further comprises providing a universal bracket in each vehicle in said fleet, said bracket configured to releasably receive any of a variety of types of said testing units.

Jones discloses a universal bracket in each vehicle in said fleet, said bracket configured to releasably receive any of a variety of types of said testing units (col. 7 lines 26-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination, by providing a universal bracket in each vehicle in said fleet, said bracket configured to releasably receive any of a variety of types of said testing units as disclosed by Jones for the purpose of attaching the testing unit to be used in a car.

6. Claims 11- 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rickli in view of Raith.

Regarding claim 11, Rickli discloses a computer software program product for testing electromagnetic signal strength near a target area (col. 6 lines 56-58),

comprising: a first executable portion configured to store test parameters, a second executable portion configured to store a dispatch plan for a fleet of vehicles serving a territory near said target area, each of said vehicles assigned to one of a plurality of routes according to a dispatch plan, said dispatch plan

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comprising vehicle data and route data (col. 2 lines 64-67, 3 lines 24-36, and col. 7 lines 14-21, i.e. registering module test computer),

a fourth executable portion configured to identify one or more optimal routes from among said plurality of routes based on the results of said third executable portion, said optimal routes comprising those most nearly satisfying said test parameters (col. 7 line 10, and 21-22, output unit),

a fifth executable portion configured to identify the vehicle assigned to each of said one or more optimal routes, said vehicle to receive one of a plurality of electromagnetic signal testing units, a sixth executable portion configured to receive data gathered by each of said plurality of signal testing units (col. 1 lines 5-15, col. 1 line 41-col. 2 line 31, and col. 7 lines 11-15, test computer).

However, Rickli fails to specifically disclose a third executable portion configured to compare said test parameters to said dispatch plan for each of said plurality of route.

Raith discloses comparing said test parameters to said dispatch plan for each of said plurality of routes (col. 3 lines 10-27, and col. 6 lines 38-49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Rickli, by comparing said test parameters to said dispatch plan for each of said plurality of routes as disclosed by Raith for the purpose of determining best route based on quality of service.

Regarding claims 12-17, the combination of Rickli and Raith discloses a computer software program product of claim 11, wherein said first executable

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portion is further configured to store test parameters including a geographic parameter, and wherein said second executable portion is further configured to store route data including a start location, an end location, and one or more intermediate stop locations (Rickli, col. 2 lines 44-59, col. 3 lines 23-33, col. 6 lines 1-5, and col. 7 lines 45-col. 8 line 5);

wherein said first executable portion is further configured to store test parameters including a geographic parameter comprising: one or more tower identifiers, each defining a tower location, and one or more sector identifiers, each of said one or more sector identifiers comprising a sector location and an antenna configuration (Rickli, see figure 1, and col. 3 lines 18-22);

wherein said first executable portion is further configured to store test parameters including a time parameter describing a time window, and wherein said second executable portion is further configured to store route data including a start time corresponding to said start location, an end time corresponding to said end location, and one or more intermediate stop durations corresponding to said one or more intermediate stop locations;

wherein said first executable portion is further configured to store test parameters including a time parameter comprising: one or more lingering parameters, each of said one or more lingering parameters comprising a linger duration, a tower identifier, and a sector identifier (Rickli, col. 2 lines 44-59, col. 3 lines 23-33, col. 6 lines 1-5, and col. 7 lines 45-col. 8 line 5);

wherein said first executable portion is further configured to store test parameters including: one or more unit parameters, each of said one or more unit

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parameters comprising a unit type and a unit feature, and a quantity parameter defining an available number of said units, and wherein said second executable portion is further configured to store vehicle data including a number of vehicles in said fleet (Rickli, col. 5 lines 22-30, 44-51, and col. 7 lines 48-55);

wherein said first executable portion is further configured to store a weight assigned to one or more of said test parameters, each of said weights correlated to the importance of said one or more of said test parameters relative to the others (Rickli, col. 2 lines 44-48 and col. 4 lines 60-65, with the aid of at least one test mobile remote unit).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to testing method:

U.S. Pub. No. 20060025158 A1 to Leblanc et al.

U.S. Pub. No. 20020081977 A1 to McCune JR

U.S. Pat. No. 6889053 B1 to Chang et al.

U.S. Pat. No. 6850730 B2 to McCune JR

U.S. Pat. No. 6263208 B1 to Chang et al.

U.S. Pat. No. 6336035 B1 to Somoza et al..

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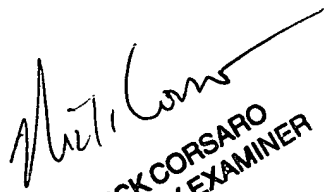
Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMEM EKONG whose telephone number is 571 272 8129. The examiner can normally be reached on 8-5 Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571 272 7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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3/1/06



NICK CORSARO
PRIMARY EXAMINER